

### ABSTRACT

A system and method is described for developing a code generator for object-oriented communication protocols. The system includes a code generation engine which automatically generates the necessary software code for communication between network devices as a function of network device profile data, network specification data and customized device data. Furthermore, receiving customized device data for a first device of a network via a graphical user interface is provided by a developer, generating a first software code for device objects of the first device and a second software code for a device linkage interface as a function of network device profile data, network specification data and the customized device data, and automatically generating a software code using the first and second software codes to allow communications between a first device and a second device of the network.